

REMARKS

Reconsideration of this application is respectfully requested in view of the foregoing amendment and the following remarks.

Claims 1-9 remain pending in this application. Claims 1 and 8 have been amended to more clearly recite features of the present invention. No new matter is presented. For the reasons stated below, Applicants respectfully submit that all claims pending in this application are in condition for allowance.

In the Office Action, claims 1-9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Miyakawa (U.S. 4,974,098) in view of Fujimoto (U.S. 6,717,734). This ground of rejection is respectfully traversed.

Amended claim 1 now sets forth an image reading apparatus which comprises a transparent cover for providing a linear image reading region that has a first length, a light source for generating light directed toward the linear image reading region on the transparent cover, a plurality of light-receiving elements that output image signals corresponding to received light, an array of lenses that focuses light onto the light-receiving elements, the array of lenses having a second length that is greater than the first length, and a light-shielding member. All of the light-receiving elements are arranged in a single line and have a first extremity and a second extremity. The first extremity extends beyond the first length of the image reading region by a first amount, whereas the second extremity extends beyond the first length of the image reading region by a second amount which is smaller than the first amount. The light-shielding member

covers at least one light-receiving element disposed at the first extremity outside the first length of the linear reading region but inside the second length of the lens array.

The newly-added limitations are found in Fig. 2 wherein the array or line of sensor chips 6 is shown to have a first extremity (right end) extending beyond the image reading region S by a greater amount, and a second extremity (left end) extending beyond the image reading region S by a smaller amount. Note that the light-shielding member 7 covers only the first extremity of the line of sensor chips 6.

As previously pointed out, the linear sensor 10 of Miyakawa has dark-time output regions 12, 13 (shielded by a light-blocking coating). Since the image reading region 1A overlaps the regions defined by trimming lines 31, the dark-time output regions 12, 13 of the linear sensor 10 unavoidably detects the trimming lines 31, which then causes fluctuations in the output level of the dark-time output regions 12, 13 and adversely affects black level adjustment, as clearly described from column 1, line 52 to column 2, line 9. Further, the Examiner may have disregarded the fact that the dark-time output regions 12, 13 of the linear sensor 10 are located inside the image reading region 1A (see Figs. 2 and 3), and this applies equally to the embodiment shown in Fig. 4. Note that strips of black regions 22, 23 shown in Fig. 4 correspond to inner part of trimming lines 31 in Fig. 3, and light from the strips of black regions 22, 23 is detected by the dark-time output regions 12, 13 (column 3, lines 35-40).

More importantly, Miyakawa also fails to teach or suggest the newly added limitations of amended claim 1. Indeed, the actual length of the linear sensor 10 is shorter than the length or width of the image reading region 1A, and the dark-time output regions 12, 13 are equally

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provided at both ends of the linear sensor. Further, it is not even clear whether the linear sensor 10, when optically considered, extends beyond the image reading region 1A.

Fujimoto discloses only the relationship between a lens array A1 and an image reading region. Clearly, this document fails to teach or suggest the newly added limitations of amended claim 1.

In view of the foregoing all of the claims in this case are believed to be in condition for allowance. Should the Examiner have any questions or determine that any further action is desirable to place this application in even better condition for issue, the Examiner is encouraged to telephone applicants' undersigned representative at the number listed below.

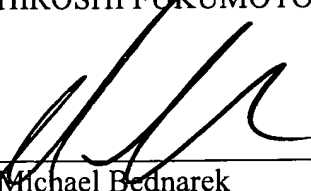
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Respectfully submitted,

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